

Preliminary Comments on the Draft ISA Plan from Dr. Helen H. Suh

General Comments

The plan for the development of the NO_x ISA is well presented and does a good job of tying the ISA framework and terminology to those used in previous ISAs. As with previous ISAs, it will be important for the NO_x ISA to include summary tables within each section that describe key studies and a chapter that integrates findings across the different disciplines (e.g., sources to exposure to health). It was not clear from the plan whether the public health impacts section was intended to serve as this integration chapter.

In addition, the summary of pre-2008 findings within the individual sections should also discuss key data gaps from the 2008 ISA. This added information will help to provide a foundation that can be used to establish whether and how our understanding of NO_x has improved since the last ISA and to justify any changes to causality determinations.

The scope of the ISA for NO_x may also need to be expanded to include consideration of other traffic pollutant measures, such as black carbon, elemental carbon, source apportionment factors, and distance to road. Since many post-2008 epidemiological studies have used NO₂ as a marker of traffic pollution, it is not clear how results from these studies alone will be used to draw overall conclusions, as consideration of findings from other studies of traffic pollution is likely needed. It is possible that the ISA will need to include some discussion of how findings for NO_x relates to other commonly used measures of traffic pollution and health.

Specific Comments

Page 8, line 22-23. The sentence beginning “Publications considered for inclusion...”] is unclear. Are all identified studies included in the HERO database, even if they do not meet the inclusion criteria? It makes sense for all identified studies to be included in the HERO database, with a notation added to each of the non-included studies as to why the study was not included.

Page 12, line 17. The discussion of NO_x in a multi-pollutant context could be expanded to include consideration of the relation of NO_x to distance to roadway and traffic density and NO_x as a surrogate to traffic pollution.

Page 14 and 15. In the health effects section, the plan states that the ISA will present and evaluate data on “studies conducted in environments near roads or other sources”. While this presentation and discussion is valuable, it should be expanded to include discussion of studies using other traffic pollutant measures and how these studies relate to those for NO₂ and health.